

Title (en)

ELASTIC HYDRAULIC ACCUMULATOR/RESERVOIR SYSTEM

Title (de)

ELASTISCHES HYDRAULISCHES SPEICHER-/BEHÄLTERSYSTEM

Title (fr)

SYSTÈME ACCUMULATEUR/RÉSERVOIR HYDRAULIQUE ÉLASTIQUE

Publication

EP 2670985 A4 20170308 (EN)

Application

EP 11857830 A 20110131

Priority

US 2011023120 W 20110131

Abstract (en)

[origin: WO2012105933A1] The invention is a combination accumulator and reservoir which stores energy when the accumulator deforms from its original shape in response to the flow of a pressurized fluid from the reservoir. The stored energy is returned when the fluid flow is reversed and the accumulator discharges the fluid and returns to its original shape. At least one part of the novelty of the invention is that the accumulator and the fluid reservoir reside in the same housing such that the volume of each varies inversely. Accordingly, the invention is more compact and weighs less than conventional accumulators. Another feature of the invention is that fluid is located around the bladder accumulator to lubricate contact between the bladder and sides of the reservoir.

IPC 8 full level

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Citation (search report)

- [X] DE 2551580 A1 19770526 - MASCHF AUGSBURG NUERNBERG AG
- [X] DE 1172910 B 19640625 - OLAER PATENT CO
- [A] WO 2010117853 A1 20101014 - UNIV VANDERBILT [US], et al
- [A] US 2009165451 A1 20090702 - MUELLER MATTHIAS [DE], et al
- [A] US 4520840 A 19850604 - MICHEL ROBERT [FR]
- [A] US 2003111124 A1 20030619 - GRAY CHARLES L [US]
- See references of WO 2012105933A1

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